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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Inventors: Hisao KOGA, et al. Art Unit: 2661
Application No.: 10/719,061 Examiner: Unassigned
Filed: November 24, 2003
For: MULTICARRIER TRANSMITTER, MULTICARRIER
RECEIVER, AND MULTICARRIER COMMUNICATIONS
APPARATUS

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner of Patents
Washington, DC 20231

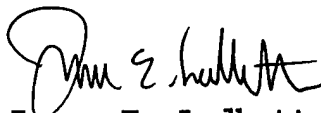
Dear Sir:

Pursuant to Rules 56 and 99, Applicants hereby call the attention of the Patent Office to the documents listed on the attached Form PTO 1449. All of these references were cited in an International Preliminary Examination Report dated February 24, 2005. The publication date of the Hawryluck, et al. article is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the particular month of publication is not in issue.

Applicants present this art so that the Patent Office may, in the first instance, determine any relevancy thereof to the presently claimed invention, see Beckman Instruments, Inc. v. Chemtronics, Inc., 439 F.2d 1369, 1380, 165 USPQ 355, 364 (5th Cir.

1970). Also see Patent Office Rules 104 and 106. Applicants respectfully request that this art be expressly considered during the prosecution of this application and made of record herein and appear among the "References Cited" on any patent to issue herefrom.

Respectfully submitted,



James E. Ledbetter
Registration No. 28,732

Date: May 2, 2005

JEL/ejw
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SERIAL NO.

10/719.061

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

APPLICANT

Hisao KOGA, et al

FILING DATE

November 24, 2003

GROUP

2661

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

International Preliminary Examination Report dated February 24, 2005.

Selesnick, Ivan, "The Design of Approximate Hilbert Transform Pairs of Wavelet Bases," IEEE Transactions on Signal Processing, Vol. 50, No. 5., IEEE, pages 1144-1152, May 2002.

Hawryluck, Mark, et al., "Efficient Equalization of Discrete Wavelet Multi-Tone Over Twisted Pair," IEEE, pages 185-191, 1998.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation is considered, draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.